

Title (en)
A SULFIDE BASED SOLID ELECTROLYTE AND A METHOD FOR MANUFACTURING THE SAME

Title (de)
FESTELEKTROLYT AUF SULFIDBASIS UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
ÉLECTROLYTE SOLIDE À BASE DE SULFURE, ET SON PROCÉDÉ DE FABRICATION

Publication
EP 4307422 A1 20240117 (EN)

Application
EP 22916721 A 20221227

Priority
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• KR 2022021443 W 20221227

Abstract (en)
Provided are a sulfide-based solid electrolyte having improved ion conductivity and a method for preparing the same. The sulfide-based solid electrolyte contains a Group 2 element, has an argyrodite-type crystal structure, is represented by the chemical formula of $\text{Li}_{7-x-2y}\text{M}_y\text{PS}_{6-x}\text{Ha}_x$ (wherein M represents at least one element selected from Group 2 elements, Ha is at least one element selected from halogen elements, Ha includes Br, and x and y satisfy the conditions of $0 < x < 2.5$ and $0 < y < 0.45$), and has a lattice volume of $950\text{--}980 \text{ \AA}^3$.

IPC 8 full level
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CPC (source: EP KR)
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